

Inside Wallops

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NASA Automated Rocket Safety System Passes Key Test

NASA has successfully demonstrated a new automated system which may enhance launch safety and reduce costs for access to space.

The autonomous flight safety system detects when a rocket is flying off course and directs itself to end the flight.

The new "self-destruct" system, tested on April 5 during a suborbital flight from White Sands Missile Range, N.M., has the potential to dramatically reduce downrange radar, telemetry and command uplink requirements while enhancing reaction time.

"The safety system was able to detect the rocket's position and compare it to the projected flight path," said Barton Bull, technology development manager at NASA's Wallops Flight Facility, "It was a very successful test of the prototype."

"In an operational system, if the onboard computers had detected that the rocket was flying off course and there was the potential of it flying outside the launch range, the vehicle would self-destruct," he said.

NASA's Kennedy Space Center, Fla., joins Wallops in supporting the project, designed to let errant vehicles use onboard

software to end a flight based on self-contained position and attitude sensors.

The system will be able to replicate all mission rules available to range safety officers without relying on any commands from the ground.

The test incorporated redundant Global Positioning System sensors and used two on-board computer processors.

One was loaded with a nominal trajectory and the other was programmed so that a nominal flight would violate safety rules and prompt a self-destruct. The system was not connected to a termination system during the test flight.

The safety system functioned and reacted correctly during the entire flight from launch to parachute deployment. The two stage sounding rocket flew to an altitude of 47.5 miles, and the experiment package was safely recovered.

The next goal of the project is to complete the design and demonstrate a system compliant with the strict reliability and redundancy rules required by range safety organizations at NASA and Department of Defense launch ranges. The next test flight of the system is tentatively scheduled for fall.

Brenda Dingwall Inducted into Hall of Honor

The Amesbury, (Mass.), Educational Foundation, Inc., has announced that Brenda Dingwall, (below), NASA Equal Opportunity Office, is a recent inductee into the Amesbury Public Schools Hall of Honor. Dingwall, a former student at the school graduated in 1981.



Photo by Lee Wingfield

The Hall of Honor recognizes former educators, students and friends of education for extraordinary fidelity, honor and service to Amesbury public schools, the community, their profession, or the United States.

Space Flight Academy Has Openings

The Virginia Space Flight Academy is accepting registrations for 11-15 year old students to experience the excitement of weeklong residential programs.

This is a unique opportunity to enjoy a week-long, summer camp experience, combined with educational field trips to NASA, NOAA and Navy facilities.

Eight camps, beginning on Sunday and ending on Friday, will be held June 18 thru August 13. Tuition for each camp is \$645, which includes double occupancy housing, meals, transportation while at camp, a workbook, T-shirt, and all instructional materials. Registration is limited to the first 34 students that apply for each weekly session.

The Academy is supported by the Eastern Shore Regional Partnership, the Mid-Atlantic Regional Spaceport, Mid-Atlantic Institute for Space and Technology, NASA, NOAA and the U.S. Navy. For further information call Bob Marshall at 757 824-3800

Congratulations to Hayden Gordon (center) who recently was recognized for 25 years of service to Computer Sciences Corporation, (CSC).



Also pictured are left to right: Mark Abel, CSC Director of New Business Development for NASA/NOAA operations; Gordon, Mina Samii, CSC Vice President of NASA/NOAA Operations; and Bob Hickman, CSC Wallops Site Manager.

Photo by Stephanie Bailey



Click It or Ticket is a high visibility enforcement program designed to raise safety belt usage and save people from death and serious injury on the streets and highways.

The Wallops Flight Facility Security Office will join Virginia Law Enforcement in the "Click It or Ticket" mobilization to enforce the Commonwealth's safety belt laws. Wallops Security will participate in high visibility patrols from now through the Memorial Day holiday.

Virginia law provides that drivers stopped for other violations can be cited if they are not properly restrained. This also applies to all front seat passengers over the age of 16.

Under Goddard's point assessment system, moving violations such as this are a 5 point violation. These points will remain on an employee's Center driving record for a 2-year period commencing with the date of issuance.

When an employee accumulates 10 or more points in any 2-year period, his/her driving privileges on the Center will be suspended for an initial period of 30 days.

Additional infractions during the same 2-year period will result in suspension periods of 60 days and 180 days.

According to The Virginia Department of Motor Vehicles, 922 persons were killed in motor vehicle related crashes in 2004. Of those, 421 persons were unrestrained and there were 8,458 injuries.

"It can not be over emphasized: safety belts save lives," said Sonny Hall, Wallops Security Specialist. "Wearing a safety belt triples your chance of surviving a crash. Proper use of safety belts saves millions of dollars in medical costs each year. We are participating in Click It or Ticket because we're committed to preventing the tragic loss of life and devastating injuries that comes with not buckling up."

Fundamentals of Investing Seminar Sponsored by the NASA Federal Credit Union

Tuesday, May 23 5:30 - 7:30 p.m. Hampton Inn, Chincoteague

Learn about the financial planning cycle, the structure of basic investments and the advantages of 401K participation. Discover how to manage risk, the importance of asset allocation, diversification and disciplined investing.

Register at the Credit Union, Building N-133 at: www.nasafcu.com/seminars or by phone at 1-888-NASA-FCU, ext. 555.

Mosquito Safety Tip by Stan Williams

The warmer weather brings us outdoors and brings out the mosquitoes!

Protect Yourself

- Spray an insect repellent that contains DEET on exposed skin and on clothing.
- Wear long-sleeves, long pants and socks when spending time outdoors.
- Mosquitoes' peak biting times are in the early morning and the early evening.
- Get rid of standing water.
- Screens should be in good repair and fitted to windows and doors.

West Nile Virus

A bite by an infected mosquito can result in West Nile Virus, which is potentially serious, especially for the elderly and those with compromised immune systems.

Dead birds may be a sign of West Nile Virus. Do not touch a dead bird with your bare hands.

Notify your primary care provider if you develop flu-like symptoms, fever, skin rash or muscle weakness after a mosquito bite.



Wallops Shorts.....

On the Road

John Valliant, Computer Sciences Corporation, made a presentation on the 2006 Artic Ice Campaign to 75 fourth-grade students at Pemberton Elementary School, Salisbury, Md., on May 9.



Bruce Underwood, NASA Advanced Projects Office, was the guest speaker for the Exmore (Va.) Rotary Club's dinner meeting on May 11.

Robby Estep, NASA Balloon Program Office, supported the NASA Sub-orbital Center of Excellence student workshop held May 13 at the University of Maryland, Eastern Shore in Princess Anne.

Phil Eberspeaker, NASA Sounding Rockets Program Office; Ed Parrott, Wallops Teacher-on-Loan; and Keith Koehler, NASA Public Affairs Office, supported the Arrowheads to Astronauts program at the Holly Center, Salisbury, Md., on May 13.

Balloon personnel are currently in Hawaii preparing for the launch of the Jet Propulsion Laboratory's Mars super pressure model balloon and in Esrange, Sweden, preparing for the launch of two long duration balloons and an Ultra-Long Duration Balloon between May 15 and mid-June.

NASA Sounding Rocket Operations (NSROC) personnel are in New Mexico preparing for one test and two Terrier-Orion launches and in Hawaii preparing for two Terrier-Orion launches currently on schedule from the end of May to mid-June.

Recall Notice Notebook Computer Batteries

HP Recalls Notebook Computer Batteries Due to Fire Hazard. For information visit: <http://www.cpsc.gov/cpscpub/prerel/prhtml06/06145.html> or call Howard Kilmon at x1486.

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